

AMENDMENTS TO THE CLAIMS

Please cancel claims 1-9 and 33-35 without prejudice or disclaimer and add new claims 36-55 as provided below:

1-35. (Cancelled)

36. (New) An electroreprographic device that is an active participant in its own services and lifecycle needs, the electroreprographic device comprising:

at least one input-output terminal (IOT);

at least one device-specific provider application programming interface (API); and

an embedded system connected to the at least one IOT through at least one existing device interface to provide a common device model, common information management (CIM) application programming interface (API), and an environment in which device services can run, the embedded system comprising:

data collection and display functionality,

a local user interface (UI) for operation and management of functionality locally,

a services platform,

at least one application programming interface (API) for remote connectivity and device-centric services, and

a device model agent (DMA) stored within nonvolatile memory of the electroreprographic device and representing the electroreprographic device to a remote services host that provides services to which the electroreprographic device can subscribe and to a remote asset management system, the DMA being operative to:

communicate a status of the electroreprographic device, a configuration of the electroreprographic device, and services offered by the electroreprographic device to the remote services host and to the remote asset management system using a common transaction language,

provide a services environment that is a runtime environment for the services on the electroreprographic device to provide device-independence for the services offered by the remote services host;

actively and dynamically monitor information about the electroreprographic device including at least one of device configuration, device status, and one or more device supply levels,

dynamically provision the electroreprographic device to automatically download software as needed to add, delete, update, and customize the services offered by the electroreprographic device which are determined by the remote services host and the remote asset management system, and

to communicate, through the local UI, services to be selectively added to or performed on the electroreprographic device.

37. (New) The electroreprographic device of claim 36, wherein the DMA further comprises:
a DMA core including:

a common information model (CIM) API,

a common information model object manager (CIMOM), and

a service manager, and

a common provider API operative to:

communicate with the at least one device-specific provider API to retrieve information about the electroreprographic device including at least one of device configuration, device status, and one or more device supply levels,

make the retrieved information about the electroreprographic device available to the CIMOM, the service manager, and to the services running in the services environment.

38. (New) The electroreprographic device of claim 37, wherein the DMA resides between the at least one device-specific API and a services layer that includes a collection of running services, and wherein the DMA is connected to a communications medium to communicate directly with the remote services host and the remote asset management system.

39. (New) The electroreprographic device of claim 36, wherein the embedded system further comprises a networked, embedded personal computer in a housing with no direct input or output devices.

40. (New) The electroreprographic device of claim 36, wherein the embedded system is connected to the IOT through at least two physical interfaces.

41. (New) The electroreprographic device of claim 36, further comprising a UI available via a browser running on a computer on a network to which the electroreprographic device is connected.

42. (New) The electroreprographic device of claim 36, further comprising a web server.

43. (New) The electroreprographic device of claim 36, wherein the DMA is operative to selectively invoke a diagnostic routine on the electroreprographic device in response to active, dynamic monitoring of the occurrence of an electroreprographic device event of interest as directed by internal or external clients or users.

44. (New) The electroreprographic device of claim 36, wherein device status indicates device conditions including availability of communication between the DMA and the IOT of the electroreprographic device.

45. (New) The electroreprographic device of claim 36, wherein DMA includes an applications/services execution/runtime environment residing between a Java runtime environment and an embedded server.

46. (New) An embedded system connected to at least one input-output terminal (IOT) of an electroreprographic device, the embedded system comprising

data collection and display functionality,

a local user interface for operation and management of functionality locally,

a services platform,

at least one application programming interface (API) for remote connectivity and device-centric services, and

a device model agent (DMA) stored within nonvolatile memory of the electroreprographic device and representing the electroreprographic device to a remote services host that provides services to which the electroreprographic device can subscribe and to a remote asset management system, the DMA being operative to:

communicate a status of the electroreprographic device, a configuration of the electroreprographic device, and services offered by the electroreprographic device to the remote services host and to the remote asset management system using a common transaction language,

provide a services environment that is a runtime environment for the services on the electroreprographic device to provide device-independence for the services offered by the remote services host;

actively and dynamically monitor information about the electroreprographic device including at least one of device configuration, device status, and one or more device supply levels,

dynamically provision the electroreprographic device to automatically download software as needed to add, delete, update, and customize the services offered by the electroreprographic device which are determined by the remote services host and the remote asset management system, and

to communicate, through the local UI, services to be selectively added to or performed on the electroreprographic device.

47. (New) The embedded system of claim 46, wherein the DMA further comprises:

a DMA core including:

a common information model (CIM) API,

a common information model object manager (CIMOM), and

a service manager, and

a common provider API operative to:

communicate with at least one device-specific provider API of the electroreprographic device to retrieve information about the electroreprographic device including at least one of device configuration, device status, and one or more device supply levels,

make the retrieved information about the electroreprographic device available to the CIMOM, the service manager, and to the services running in the services environment.

48. (New) The embedded system of claim 47, wherein the DMA resides between the at least one device-specific API and a services layer that includes a collection of running services, and wherein the DMA is connected to a communications medium to communicate directly with the remote services host and the remote asset management system.

49. (New) The embedded system of claim 46, comprising a networked, embedded personal computer in a housing with no direct input or output devices.

50. (New) The embedded system of claim 46, wherein the embedded system is connected to the IOT through at least two physical interfaces.

51. (New) The embedded system of claim 46, comprising a UI available via a browser running on a computer on a network to which the electroreprographic device is connected.

52. (New) The embedded system of claim 46, comprising further comprising a web server.

53. (New) The embedded system of claim 46, wherein the DMA is operative to selectively invoke a diagnostic routine on the electroreprographic device in response to active, dynamic monitoring of the occurrence of an electroreprographic device event of interest as directed by internal or external clients or users.

54. (New) The embedded system of claim 46, wherein device status indicates device conditions including availability of communication between the DMA and the IOT of the electroreprographic device.

55. (New) The embedded system of claim 46, wherein DMA includes an applications/services execution/runtime environment residing between a Java runtime environment and an embedded server.